



### CLEAN COPY OF ABSTRACT

Parallel jobs comprise multiple tasks that can be executed in parallel by separate resources to produce an exit status for each task. The resource manager receives the jobs and dispatches the parallel tasks of the job together with task starters to a job launcher unit. The job launcher unit starts the task starters on the selected resources. Each task starter is associated with a task and commences execution of the task on the selected resource. At commencement of a task, the task starter sends the host and process identifier to the resource manager. At completion of the task, the task starters collect the exit status of the task from the associated resource and send the exit status of the task back to the resource manager. An external event unit associated with the resource manager receives the process identifier and exit status of the tasks from the task starter.